# Outdoor Lighting Measures





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#### **Article 1 Changes**

- Adds unconditioned buildings
- Adds definitions needed for outdoor lighting
- Defines high efficacy lighting





#### **Lighting Zones**

- Adds administrative regulations for outdoor lighting zones
  - LZ1 Natural
  - LZ2 Low Ambient
  - LZ3 Moderate Ambient
  - LZ4 High Ambient
- Population Density Based
- Local ability to modify and interpret





#### **Lighting Zones**

- Zone Definitions
  - Zone 1 State and national Parks, nature preserves, and wildlife preserves
  - Zone 2 Rural areas as defined in 2000 census
  - Zone 3 Urban areas as defined in 2000 census
  - Zone 4 Intensive lighting area as identified and approved by a local jurisdiction
- Local jurisdictions can move a
  - 2 to a 1 or a 2 to a 3
  - 3 to a 2 or a 3 to a 4



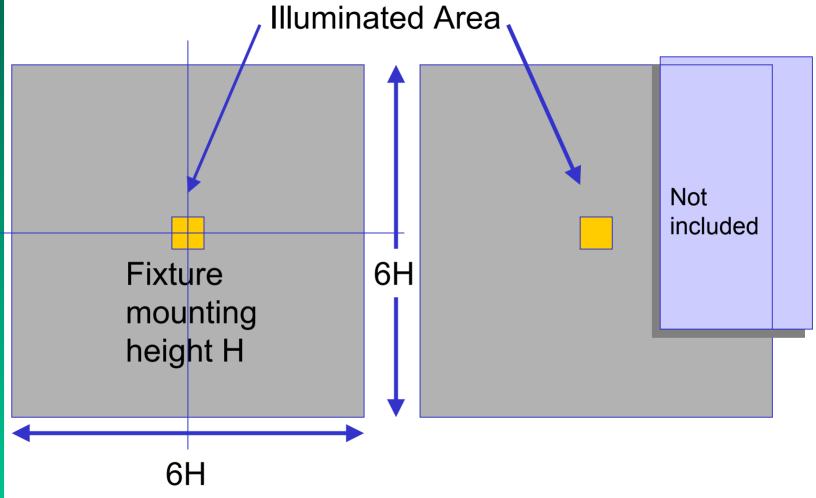


## Section 133 – Prescriptive Requirements for Exterior Lighting

- Establishes power density values for exterior lighting
- Includes allowances that can be traded off (general exterior lighting) and use it or lose it allowances
- Requires that an area "be illuminated" to get the allowance
- Includes signs
- Based on IESNA Handbook, 9th Edition,
  RP-33-99 and RP-2-01



## Concept of "Illuminated Area"







#### **Basis of General Values**

Lighting Application	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
Parking Lots and Hardscape Plazas	0.04 (.5 fc)	0.06 (1.0 fc)	0.08 (1.5 fc)	0.15 (3 fc)
Building Grounds in linear feet	1.0 w/lf (1.0 fc)	1.5 w/lf (1.5 fc)	2.5 w/sf (2.5 fc)	5.0 w/lf (5 fc)
Building Entrances (with and without canopy)	0.50 (5 fc)	0.50 (5 fc)	.70 (10 fc)	1.00 (15 fc)
Non-sales canopies	0.12 (1.0 fc)	0.25 (2.0 fc)	0.50 (5.0 fc)	0.70 (10 fc)
Vehicle and Retail Sales Lots	Not allowed	0.70 (10 fc)	1.25 (25 fc)	2.00 (50 fc)





#### **Basis of Use It or Lose It Values**

Lighting Application	Lighting Zone 1	Lighting Zone 2	<b>Lighting Zone 3</b>	Lighting Zone 4
Building Facades	Not allowed	0.18	0.35	0.50
Exterior Sales Frontage (Frontage in linear feet)	Not allowed	22.5(W/ft) 25 fc	38.5 (W/ft) 50 fc	55 (W/ft) 75 fc
Retail Gas and Vehicle Service Station Canopies	0.70* (10 fc)	1.00 (15 fc)	1.25 (25 fc)	2.00 (50 fc)
Retail Gas and Vehicle Service Station without Canopy (area within 25' of any pump)	0.70* (10 fc)	0.70 (10 fc)	1.25 (25 fc)	2.00 (50 fc)
All Other Sales Canopies	Not allowed	0.70* (10 fc)	1.00 (15 fc)	1.25 (25 fc)
Landscape Lighting	0.25 w/sf	0.50 w/sf	1.00 w/sf	2.00 w/sf
Internally Illuminated Panel Signs	2.0	4.0	6.0	8.0
Externally Illuminated Signs	1.0	1.8	2.3	2.3





### **Outdoor Signs and Billboards**

- Proponent: CEC

- Workshop: June 18

Standard: NR Lgt



